**Technical Specifications : Vapour Absorption Chiller**

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| --- | --- | --- | --- |
| Client | a | Version | 1.2.0 Dt : 07-Aug-2021 |
| Enquiry | a | Date | 18-Aug-2021, 12:02 |
| Project | a | Model | TAC S1 M1 |

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| --- | --- | --- | --- |
|  | **Description** | **Unit** |  |
|  | **Capacity ( + 3 %) :** | **TR** | 40 |
|  | | | |
| **A** | **Chilled Water Circuit :** | | |
|  | Chilled water flow | m³/hr | 24.1 |
|  | Chilled water inlet temperature | °C | 12 |
|  | Chilled water outlet temperature | °C | 7 |
|  | Evaporate passes | No. | 2+2 |
|  | Chilled water circuit pressure loss | mLC | 5.3 |
|  | Chilled water Connection diameter | DN | 80 |
|  | Glycol type |  | NA |
|  | Chilled water glycol % | % | 0 |
|  | Chilled water fouling factor | m² hr °C/kcal | standard |
|  | Maximum working pressure | kg/cm²(g) | 8 |
|  | | | |
| **B** | **Cooling Water Circuit:** | | |
|  | Heat Rejected | kcal/Hr | 276041.6 |
|  | Cooling water flow | m³/hr | 48 |
|  | Cooling water inlet temperature | °C | 32 |
|  | Cooling water outlet temperature | °C | 37.8 |
|  | Absorber / Condenser passes | No. | 1+1/2 |
|  | Cooling water Bypass Flow | m³/hr | - |
|  | Cooling water circuit pressure loss | mLC | 5 |
|  | Cooling water Connection diameter | DN | 100 |
|  | Glycol type |  | NA |
|  | Cooling water glycol % | % | 0 |
|  | Cooling water fouling factor | m² hr °C/kcal | standard |
|  | Maximum working pressure | kg/cm²(g) | 8 |
|  | | | |
| **C** | **Steam Circuit :** | | |
|  | Heat Input | kcal/Hr | 155081.6 |
|  | Steam pressure (Dry Saturated) | kg/cm²(g) | 1.5 |
|  | Steam Consumption ( + 3 %) | kg/hr | 277.2 |
|  | Condensate drain temperature | °C | 80 – 100 |
|  | Condensate drain pressure | kg/cm²(g) | 0.2 |
|  | Connection - Inlet diameter | DN | 100 |
|  | Connection - Drain diameter | DN | 20 |
|  | Design Pressure | kg/cm²(g) | 10.5 |
|  | | | |
| **D** | **Electrical Data :** | | |
| 1. | Power supply |  | 415 V( ±10%), 50 Hz (±5%), 3 Phase+N |
| 2. | Power consumption | kVA | 5.2 |
| 3. | Absorbent pump rating | kW (A) | 1.1 (3.4) |
| 4. | Refrigerant pump rating | kW (A) | 0.1 (0.6) |
| 5. | Vacuum pump rating | kW (A) | 0.75 (1.8) |
|  | | | |
| **E** | **Physical Data :** | | |
| 1. | Length | mm | 2800 |
| 2. | Width | mm | 1450 |
| 3. | Height | mm | 2250 |
| 4. | Operating weight | ton | 3.2 |
| 5. | Dry weight | ton | 2.7 |
| 6. | Shipping weight | ton | 3 |
| 7. | Flooded weight | ton | 4.6 |
| 8. | Tube cleaning space (any one side length-wise) | mm | 2700 |
|  | | | |
| **F** | **Tube Metallurgy :** | | |
| 1. | Evaporator |  | name |
| 2. | Absorber tube material |  | Copper |
| 3. | Condenser tube material |  | Copper |
|  | | | |

Caption Notes:

1. This selection is valid for insulated chiller only.

2. For non-insulated chiller, the Capacity and Heat source consumption will vary.

3. Plant Room Temperature should be from +5 deg C to +45 deg C

4. Please contact Thermax representative / Office for customised specifications.